

#### INSTALLATION, OPERATION AND MAINTENANCE MANUAL

#### Warning

Please read carefully before proceeding with installation. Your failure to follow any attached instructions or operating parameters may lead to the product's failure and possible damage to property.

#### Save manual for future reference

## **MODELS**

5 SV DELUXE RO-TFM-4SV

WATTS PREMIER 25 RO-TFM-5SV

CRO-TFM-5SV PUR-TEK

**ULTRA 5** 

System Tested and certified by NSF International against ANSI/NSF Standard 58 for the reduction of claims specified on performance data sheet.

Refer to enclosed warranty for operating parameters to ensure proper use with your water supply.

Watts Premier, Inc. Phone: 800-752-5582 1725 W. Williams Drive C-20 www.wattspremier.com

Phoenix, AZ 85027 Fax: 623-931-0191 Thank you for your purchase of a Premier Reverse Osmosis system. With proper installation and maintenance, this system will provide you with high quality water for years to come. All of Premier's water enhancement products are rigorously tested by independent laboratories for safety and reliability. If you have any questions or concerns, please contact our customer service department at 1-800-752-5582 (outside USA 623-931-1977) or refer to our online troubleshooting at www.wattspremier.com.

## **Table of Contents**

Operational Parameters	4
Contents of Reverse Osmosis System	4
Tools Recommended For Installation	4
Drill a Hole for the Faucet in a Porcelain Sink	5
Punch a Hole for the Faucet in a Stainless Steel Sink	5
Faucet Installation	. 6
Adapta Valve Installation	7
Reverse Osmosis Module Mounting	. 7
Drain Saddle Installation	. 8
Tank Tee Installation	8
Green Tube Connection	9
Blue Tube Connection	9
Black Tube Connection	10
Red Tube Connection	10
6" Final Filter Installation	10
10" Final Filter Installation	. 11
Start up Instructions	12
6 Month System Maintenance	13
Annual Maintenance	14
Membrane Maintenance	15
Check Air Pressure in the Tank	16
5 Stage Reverse Osmosis System	19
California Certification	21
Other Products from Watts Premier	22
Warranty Registration	.25
Service Record	27
Limited Warranty	.28

## **Operational Parameters**

Do not use with water that is microbiologically unsafe or of unknown quality, without adequate disinfection before or after the system.

Operating Temperatures:	Maximum 100°F (37.8°C)	Minimum 40°F 4.4°C)
Operating Pressure:	Maximum 100 psi (7.43 g/cm2)	Minimum 40 psi (2.80 kg/cm2)
pH Parameters:	Maximum 11	Minimum 3
Iron:	Maximum 0.2 ppm	
TDS (Total Dissolved Solids):	< 1800 ppm	
Turbidity:	< 5NTU	

**Hardness:** Recommended hardness not to exceed 10 grains per gallon, or 120ppm. System will operate with hardness over 10 grains but the membrane life may be shortened. Addition of a water softener may lengthen the membrane life.

**Note:** The operating pressure in your home should be tested over a 24 hour period to attain the maximum pressure. If it is above 100 psi then a pressure regulator will be required.

**Note:** Reverse Osmosis water should not be run through copper tubing as the purity of the water will leach copper and cause an objectional taste in water and cause pin holes to form in tubing. Be sure to follow any state or local regulations.

## **Contents of Reverse Osmosis System**

5 Stage RO System has 3 bowls. 4 Stage RO System has two bowls.

- 1 Tank Blue or White
- 1 Module Blue or White
- 1 Parts Bag With a 6" or 10" Final Filter
- 1 Faucet Bag
- 1 Manual and Warranty Card



If any of the items are missing please contact Premier prior to installing.

## **Tools Recommended For Installation**

- √ 1 1/4" Hole Saw Bit for Faucet opening
- √ Round Knock out Punch for Stainless Sinks, ½" & 1 ¼"
- √ Adjustable Wrench
- √ Sharp Knife
- $\sqrt{1/2}$ " 5/8" Open End Wrenches
- √ Phillips Screw Driver
- √ Needle Nose Pliers Adjustable Pliers
- √ Electric Drill
- $\sqrt{1/8}$ ", 1/4" & 3/8" Drill Bits



## Drill a Hole for the Faucet in a Porcelain Sink

Note:

Porcelain sink surface material is extremely hard and can crack or chip quite easily. Use extreme caution when drilling. Premier Manufactured Systems accepts no responsibility for consequential damage resulting from the installation of faucet.

A dripping or gurgling sound may be heard coming from the Air Gap hole in the faucet when the system is running. This is normal and in compliance with UPC Plumbing Codes.

Most sinks are predrilled with 1 ½" or 1 ¼" diameter holes (if you are already using it for a sprayer or soap dispenser, see step 1).

#### See the Faucet Installation section for the proper size hole to drill for a non air gap faucet.

- Step 1 Determine desired location for the faucet on your sink and place a piece of masking tape on location where the hole is to be drilled. Mark the center of the hole on the tape.
- Step 2 Using a variable speed drill on the slowest speed, drill a  $^{1}/_{8}$ " Pilot hole through both porcelain and metal casing of sink at the center of the desired location. (If drill bit gets hot it may cause the porcelain to crack or chip).



Step 3 Using a 1 ¼" hole saw, proceed to drill the large hole. Keep drill speed on the slowest speed and use lubricating oil or liquid soap to keep the hole saw cool during cutting.

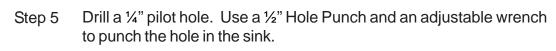


Step 4 Make sure the surroundings of the sink are cooled before mounting the faucet to the sink after drilling. Remove all sharp edges with a file.



## Punch a Hole for the Faucet in a Stainless Steel Sink

Note: If mounting faucet to a Stainless Steel Sink you will need a ½" & 1 ¼" Hole Punch. The faucet opening should be centered between the back splash and the edge of the sink, ideally on the same side as the vertical drain pipe.



The faucet can now be installed.





## **Wave Faucet Installation**

Note: If using the Wave Air Gap Faucet (included), a 1 1/4" hole will be required.

If using a Wave non air gap faucet, a 3/4" hole will be required.

Step 6 Gather and identify the Wave faucet pieces.

**Air Gap Faucet** 

- Faucet assembly
- Black Shank Nut
- Spacer
- Gasket



Faucet assembly

Black Shank Nut

Non Air Gap Faucet • Slotted washer

- Gasket -
- 3' Blue Tube



Step 7 Remove black stem nut and insert the three tubes (air gap faucet) through the white gasket with the groove on the gasket toward the faucet base.



Step 8 Insert the three tubes through the 1 1/4" hole in the sink. The white gasket must be on top side of the sink.



Step 9 View from under the sink and insert the white plastic spacer as shown. (A slotted washer is used if it is a non air gap faucet.)



Step 10 Thread the black stem nut back onto the white threaded stem and thighten within ¼" of plastic spacer. Check the orientation of the faucet above the sink and tighten the black plastic washer until white plastic spacer is snug and faucet stands securely on top of the sink. (For a non air gap faucet, the blue tube will have to be pushed into the faucet fitting at the bottom of the faucet. Push the tube all the way to the "tube stop" inside the fitting.)



Note: A dripping or gurgling sound may be heard coming from the air gap hole on the faucet or the drain when the system is running. This is normal and

in compliance with UPC (Universal Plumbing Code).

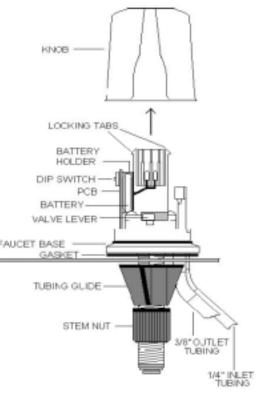
## AG-SS with Monitor Faucet Installation

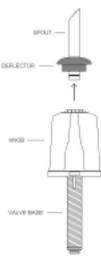
Note: If using the AG-SS Monitor Air Gap Faucet, a 1 1/4" hole will be required.

- Gather and identify the M-500 faucet pieces. Step 6
- Step 7 Remove Faucet and small parts from plastic bag. Slip the Gasket over the threaded Stem to the Faucet Flange. From above the sink, feed the tubing and Faucet Stem down through the 11/4 inch mounting hole in the Sink.
- From below the sink, slide the Tubing Guide up the threaded Stem Step 8 and follow it with the Mounting Nut, turning the nut clockwise until fully tightened.
- Press the blue colored Product Water Tubing, coming Step 9 from the RO purification system into the end of the threaded Stem. Push it all the way in and then pull on it SINK TOP ... firmly to verify it is locked in place.
- Refer to Black Tube Connection and Red Tube Step 10 **Connection** steps in this manual to complete the faucet installation.
- Step 11 upward. SEE DRAWING Remove the Faucet Knob by pinching the two locking tabs inward and then pulling upward on the Knob while the tabs are pinched inward. Push the coin cell Battery into the Battery Holder behind the Circuit Board. NOTE: the + side of the Battery goes against the Gold metal bracket.

Remove the Spout from the top of the Faucet by pulling it straight

- Step 12 Replace the Knob by centering it over the Faucet and aligning the trough on the inside of the Faucet Knob with the Valve Lever. Lower the Knob making sure the Valve Lever slides into the trough, making sure the Knob top hole is centered over the locking tabs. Push the Knob all the way down until it locks in place. Push the Spout back into the top of the Faucet so that it is fully seated and push the frosted Deflector down until fully seated. You may have to rotate the Deflector until it is in position to be fully seated.
- Step 13 With the Knob rotated to the Right about ½ inch, turn the source water to your RO purification system on and check for leaks. You should see the Green light flash at the base of the Faucet while water is flowing through the Faucet (red light may flash when system is initially producing water, this will turn green following the initial tank flush). When you see the Red light flash, it means it is time to replace your filter cartridge(s). Turn the Knob to the left until water stops flowing and check for leaks.
- A dripping or gurgling sound may be heard coming from the air gap hole on the faucet or Note: the drain when the system is running. This is normal and in compliance with UPC (Universal Plumbing Code) requirements.





## **Adapta Valve Installation**



Configuration for 3/8" compression fittings





Configuration for 1/2" compression fittings

- Step 11 Turn off the cold water supply to the faucet by turning the angle stop valve completely off.
- Step 12 Attach adapta valve as illustrated in the three photos above, choosing the configuration that fits your plumbing. (When attaching the adapta valve to straight pipe threads, use Teflon tape on the treads.) The green tube from inlet side of RO module will be cut to length and attached later in the installation.

**Caution:** Watersupply line to the system must be from the cold water supply line. Hot water will severely damage your system.

## **Reverse Osmosis Module Mounting**

Step 13 Determine best location for the RO module to be mounted to allow for future system maintenance. The parts bag has 2 self tapping screws. Using a phillips screwdriver, screw them into the cabinet wall 10 3/4" apart and 16" from the bottom of the cabinet.





Note: **Do not cut these tubes at this time** 

### **Drain Saddle Installation**

#### Drain Saddle fits standard 1 1/4" - 1 1/2" drain pipes

- Step 14 Gather the pieces of the drain saddle
  - 1 Black compression nut
  - 1 Semi-circle bracket with opening
  - 2 Screws
  - 1 Foam washer
  - 2 Nuts for screws
  - 1 Semi-circle bracket
- Step 15 The small square black foam gasket with a circle cut out of the middle must be applied to the inside of the drain saddle. Remove sticky tape backing and stick to the drain saddle as shown.



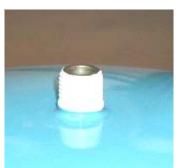
Step 16 Drill a ¼" hole through the drain pipe at least 1 ½" above the nut of the P-trap to allow for the removal of the P-trap if necessary. Assemble the drain saddle around the drain pipe. Position the drain saddle over the drilled hole in pipe. Insert screw driver into the opening of the drain saddle and align with drilled hole in drain pipe. Using Philips screw driver tighten screws evenly and securely on both sides of the drain saddle. Attach black compression nut, but do not tighten at this time. The black tubing will be installed later.



**Caution:** Do not over tighten the screws. It may crack the drain saddle.

## **Tank Tee Installation**

Step 17 Teflon tape must be applied in a clockwise direction. Wrap (7 to 12 turns) around the male pipe threads (MPT) on the Stainless Steel fitting on top of the tank.



Step 18 Thread the brass tee (supplied in the parts bag) onto the brass connection on the top of tank. Tighten using an adjustable wrench.



Caution: Do not teflon tape the compression fitting threads. If taped it will leak.

### **Green Tube Connection**

- Step 19 Drape the green tube connected to the 90° Inlet white plastic elbow on the left side of the Reverse Osmosis Module over to the adapta valve attached to the cold water sink faucet or attached to the Angle Stop Valve, leaving a gentle curve in the tubing. Cut to desired length using a sharp knife.
- Step 20 Remove a brass nut, plastic delrin sleeve and brass insert from the parts bag. Place nut on the tube first, then the Delrin sleeve and then insert the brass Insert into the end of the tube. (Small taper end of Delrin sleeve must point to the end of tube).



Step 21 Insert the green tube into the ¼" opening until it stops. Slide nut and sleeve down and thread onto the male pipe threads. Use a ½" wrench to securely tighten.



## **Blue Tube Connection**

Step 22 Position tank in desired location. Stand it upright or lay it on its side (using the black plastic stand). Measure the blue tube from the RO module over to the tank and cut it to length.



Step 23 Push blue tube into the brass tee until it stops. Slide brass nut and plastic Delrin sleeve down until you can thread nut onto the tee. Use wrench to securely tighten the nut.



Page 9



#### **Black Tube Connection**

Note: The tubing must be as SHORT and STRAIGHT as possible, making a downward slope from faucet to drain saddle to allowfor proper drainage.

Step 24 Measure the black tube from faucet to the black drain saddle and make a straight cut with a sharp knife though tube.

Step 25 Remove black plastic nut from drain saddle. Slip black tube through black nut. Insert black tube into the opening in the drain saddle and tighten the black nut securely.

Note: This is a gravity fed line, if there is any bend in the tube the rinse water will not flow into the drain properly. Water will back up and come out the air gap hole in the back of the faucet base.



#### **Red Tube Connection**

Step 26 Using the white plastic union in the parts bag, determine where the red tubing from the faucet and the black tubing from the RO membrane housing would join together comfortably. Cut the tubes leaving a straight cut on both tubes. Insert the red tube in one end of the white plastic union and the black tube in the other end. Use a 5/8" wrench to tighten both of the white plastic nuts securely.



## 6" Final Filter Installation

Step 27 Gather the pieces needed for the Final Filter installation. Each unit is supplied with a final filter and 2 white plastic connectors.



Step 28 Remove the blue caps from the final filter.



Step 29 Thread the 2 white plastic connectors into the final filter and tighten.



Step 30 To install the 6" filter cut the blue tube from the faucet approximately in half. Insert the blue tube attached to the faucet into the "out" port of the filter. The flow arrow should be pointing toward the faucet. Take the left over section of blue tube and insert it into the other white connector. Tighten the white compression nuts with a 5/8" wrench.



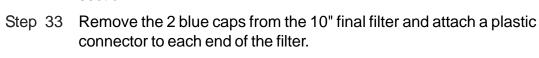
Step 31 Slip the brass nut over blue tubing from faucet, then slip the white Delrin sleeve over the tubing and insert the brass insert into the end of the blue tubing. (Same as in the Green Tube Connection section.)



Step 32 Insert the tubing into the brass tank tee until it stops. Slide the brass nut and delrin sleeve along the tube until you can thread the nut onto the tank tee. Use a ½" open end wrench to tighten the nut securely.

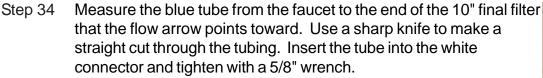
## 10" Final Filter Installation

Note: If the system has a 6" final filter, refer to the 6" inch final filter installation. If the 6" final filter has already been installed skip this section.





Snap the 2 white clips from the parts bag onto the top of the membrane vessel. Snap the 10" final filter into the clips.





## **Start up Instructions**

- Note: If unit is supplied with GAC Carbon Filters (hard plastic case) you will need to start at step # 1 in this section. If unit is supplied with Carbon Block Filters (mesh covering) you may skip to Step 4 of this section.
- Step 1 Disconnect the green tube that runs from the 3<sup>rd</sup> Stage Filter Housing to the Automatic Shut- Off Valve and place it in a bucket.
- Step 2 Turn on the cold water supply and allow water to flow into the bucket until the water is clear (as shown in the 6 month System Maintenance section steps 10 and 11.) Then turn off the incoming water supply.
- Step 3 Reconnect the green tube to the Automatic Shut-Off Valve and tighten with 5/8" wrench. (If the system is hooked up to an Ice Maker see the note below.)
- Step 4 Turn on the incoming cold water. Check the system for leaks and tighten any fitting as necessary. (Check over the next 24 hours to ensure no leaks are present).
- Step 5 Open the RO faucet and leave it open until water begins to trickle out. (it will come out slowly)
- Step 6 The tank will take between 4 to 6 hours to fill completely (depending on the size of the membrane, local water temperature and pressure). After the Tank has filled, open the RO Faucet and flush the Tank completely and to remove carbon particles from final filter.

There is an average of 4 gallons of reject water for every 1 gallon of product water produced.

- Note: If system is hooked up to an Ice Maker, turn Ice Maker off until tank has filled, then flushed and refilled before allowing water to flow to Ice Maker. The system should have a ball valve installed before the Ice Maker so it can be closed to prevent water flowing to the Ice Maker. Your tank must be allowed to fill up in order for the unit to shut off. (If you are installing an Ice Maker Kit, tee off after the final filter).
- Step 7 Fill out postage paid warranty card (phone no. is necessary for registration) and drop it in the mail. Premier uses this information to provide a free filter change reminder service. Pre-filters should be changed every six months. You may also register your warranty via our website at www.wattspremier.com or call 1-800-752-5582 (within USA only).
- Step 8 Inspect the reverse osmosis system periodically to ensure the unit is functioning properly.

## **6 Month System Maintenance**

#### Items needed:

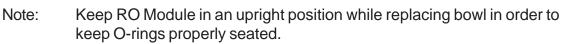
- $\sqrt{\text{One } 10^{\circ}\text{ sediment filter}}$
- √ Two 10" carbon filters
- $\sqrt{}$  Bucket to catch water from filter housings.
- $\sqrt{\text{Wrench to loosen filter bowls.}}$  (Watts Premier also sells a double sided wrench).
- Step 1 Turn off incoming water supply to the RO at needle valve on adapta valve.
- Open RO Faucet to allow the water to drain from tank until completely empty. Water can Step 2 be saved in a container for drinking or to rinse system parts.
- Step 3 Let system sit for 10 – 15 minutes after tank is empty to depressurize before attempting to remove filter housings.
- Step 4 For more leverage, leave RO module attached to wall of cabinet. If you are unable to access the module you may remove it to change filters. Starting with the closest housing, remove and empty water, then discard filters. Continue on to the 2<sup>nd</sup> and/or 3<sup>rd</sup> Bowls.



Step 5 Clean all filter housings (bowls) with a mild soap solution and rinse with water. Check O-rings and lubricate with water soluble lubricant. KY Jelly® and other water based lubricants can be used, but petroleum based lubricants (such as Vaseline®) must not be used.



Step 6 The sediment filter has a cloth like appearance. It must be in the 1st Housing on the left (where the water inlet connects).

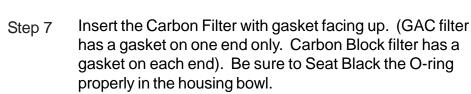


GAC Carbon filter is encased in a hard plastic shell and has a white rubber gasket on one end only.

Carbon Block filter has a mesh covering and a white rubber gasket on



each end.







Repeat this step for 3<sup>rd</sup> housing (5 Stage units only). Step 8

**Important:** Follow Step 10 - 11 only if you have GAC (hard plastic carbon filter.) If carbon particles are not rinsed out they may clog the flow restrictor which could then foul the membrane. The carbon block filter does not need to be flushed.

Step 9 After changing pre-filters, disconnect the green tube at the Automatic Shut-Off Valve, using a 5/8" wrench to loosen nut.



Step 10 Hold green tube over a bucket. Turn on incoming water at Adapta Valve and flush out all carbon particles from the filters. As soon as the water runs clear, turn off the incoming water and re-attach green tube to the Automatic Shut-Off Valve. Using a 5/8" wrench tighten black nut securely.



Step 11 Perform steps 4, 5 and 6 in the start up instruction section.

## **Annual Maintenance**

Watts Premier sells a filter change kit which includes pre-filters, orings, a final filter, connectors, and a wrench. Call 1-800-752-5582 or buy online at www.wattspremier.com.

Step 1 Perform 6 month system mainenance. (previous section)

Step 2 The Final Filter should be replaced annually. Remove White Nuts at both ends of the filter to replace the old Final Filter. Replace with new filter and connectors.

Note: Flow Arrow on final filter must be pointing in the direction of the out flow of water.

Step 4 Annual Sanitizing of unit is recommended to prevent bacteria growth. Remove the Blue Tube from the left side of the Automatic Shut Off Valve (Marked "OUT").



Step 5 Using a clean eye dropper insert ½ teaspoon of 3% hydrogen peroxide or common household beach into the blue tube. This will flow into the tank once water is turned back on to unit. Reattach blue tube to Automatic Shut Off Valve. Follow start up procedure.



## **Membrane Maintenance**

Membranes have a life expectancy of between 2 and 5 years, depending on the incoming water conditions and the amount of use of the RO system.

Normally, a membrane would be replaced during a semiannual or annual filter change. However, if at any time you notice a reduction in water production or an unpleasant taste in the reverse osmosis water, it could be time to replace the membrane. A sample may be sent into Premier for a free test or a TDS (total desolved solids) monitor can be purchased from Watts Premier to test the incoming and reverse osmosis water.

To send a water sample, include ½ cup of tap water and ½ cup of the system's reverse osmosis water in clean containers. Clearly mark each container. Watts Premier will test the water and call or mail you the results.

Step 1 To change the membrane, use a 5/8" wrench to remove the Green Tube on the left side of the membrane housing (the end with only one elbow).



Step 2 Remove the cap from the white horizontal membrane housing. Turn Cap counter clockwise to loosen.

Note: A double sided wrench can be purchased from Premier.



Step 3 Using a pair of pliers, grip and pull firmly on the membrane to remove from the housing and discard.



Step 4 Unwrap new membrane and lubricate the o-rings with water soluble lubrication such as KY Jelly ® before inserting into housing. Insert end with the two black O-rings into the membrane housing.



Step 5 Once membrane has been inserted into the housing you must take your thumbs and give a firm push to properly seat the membrane. Replace membrane housing cap and tighten.



## **Membrane Maintenance (Continued)**

#### Tip of Membrane .

#### Edge of Housing-

Note: To be properly seated the tip of the Membrane must be below the

housing edge.

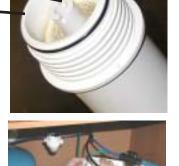
Step 8 After replacing membrane housing into clips, attach the green tube to

the elbow on cap using 5/8" wrench.

Step 9 The flow restrictor must be changed each time you change the

Membrane. Replace the existing flow restrictor with the new one by removing the White Compression Nuts. Be sure to orientate the Flow

with the arrow pointing toward the faucet.



Step 10 Follow the Start Up Instructions.

## **Check Air Pressure in the Tank**

Note: Check air pressure when tank is empty!

Step 1 Using a digital air gauge check the air pressure in the tank. You should

always have between 5-7 psi. If you have more than 7 psi release air and recheck. If you have less than 5 psi, add air. Air can be added with

a bicycle pump.



Step 2 Your unit comes with a stand for your storage tank to sit on if you need

to turn the unit on its side.



Step 3 This allows for air flow under the tank keeping moisture and standing

water from rusting on the bottom of your tank which would void your

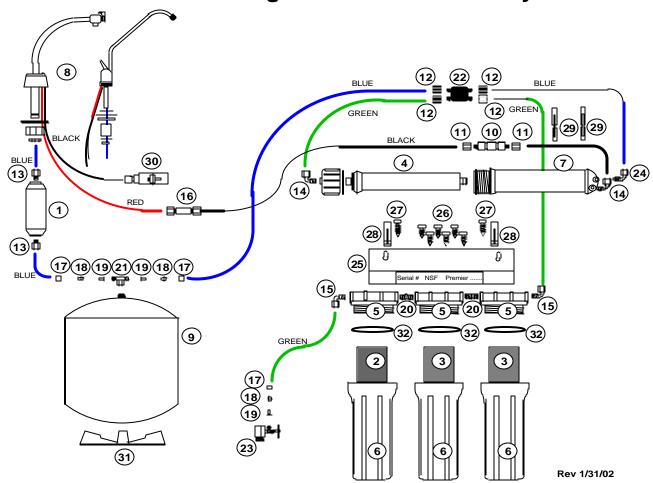
warranty.



## **TROUBLE SHOOTING**

PROBLEM	CAUSE	SOLUTIONS
1. Low/Slow Production	Low Water Pressure	Assure a minimum of 40 psi incoming water pressure. Premier sells a booster pump if home water pressure is low. Make sure water supply is turned on and Adapta Valve is all the way open.
	Crimps in tubing	Check tubing and straighten or repair as necessary.
	Clogged pre-filters	Replace pre-filters.
	Fouled membrane	Replace membrane and FlowRestrictor.
2. Milky Colored Water	Air in system	Air in the system is a normal occurrence with initial start up of the RO system. This milky look will disappear during normal use within 1-2 weeks. If condition reoccurs after filter changes, drain tank 1 to 2 times.
Water constantly running / unit will not shut off	Low water pressure	See #1 above
	Crimp in supply tube	Check tubing and straighten or repair as necessary.
	High water pressure	Check incoming water pressure to make sure it does not exceed 80 psi. A pressure relief valve may be necessary.
	High pressure in	Empty storage tank of water. Set tank air pressure to 5 psi. See previous page.
4. Noise from faucet or drain	Air gap faucet	Inherent sound with air-gap faucets.
	Location of drain saddle	See diagram for proper location of drain saddle.
	Restriction in drain tube	Clear blockage sometimes caused by debris from garbage disposal or dishwasher.
	High water pressure	Pressure regulator required if pressure exceeds 80 psi.
5. Faucet leaks from the air gap feature	Crimp in drain line	Check tubing.
	Restriction in drain line	Straighten all drain lines. Clear blockage. Cut off any excess tubing.
	Drain tube clogged	Caused from dishwasher or garbage disposal. Disconnect the 3/8" black line at the drain, clean the 3/8" black line out with a wire, then re-connect. Blowing air through the line will not always remove the clog.
Small amount of water in storage tank	System just starting up	Normally it takes 6-10 hours to fill tank. Note: Low pressure and/or temperature can drastically reduce production rate.
	Low water pressure	See #1 above
	Excessive air in tank bladder	Tank pressure is set at the factory and should be 5 psi when empty. Add if below 5 psi and bleed if above 5 psi. Check only when tank is empty. See previous page.
7. Water leaks from the blue / white filter housing	Not properly tightened	Tighten the bowl
	Kinked oring	Turn off the water supply and release the pressure. Replace the oring if necessary. Then lubricate it and make sure the oring is seated in the filter bowl properly before reinstalling the filter bowl.

## Parts List for 5 Stage Reverse Osmosis System



<sup>\*</sup> The reverse osmosis system contains a replaceable treatment component, critical for the effective reduction of total dissolved solids and that the product water shall be tested periodically to verify that the system is performing properly

Ite	m #	Part #	Description	Item #	Part #	Description
1	а	100004	GAC-IL-6"-1/4 F (1M-6)	16	125041	UNI-PL-1/4CX1/4C
1	b	100014	GAC-IL-10"-1/4 F (PREMIER)	17	131002	NUT-BR-1/4C"
2		104017	SED-SPUN-10"-5M-CTG(5M-10)	18	131012	SLEEVE-DELRIN-1/4"
3	а	101009	CARBONBLOCK-10"-5M-CTG	19	131017	INSERT-BR-1/4"
3	b	100036	GAC 10" - 56 Cu In CPG	20	131021	HEX NIPPLE-BR-1/4 HEAVY DUTY
4	а	110004	*MEM-TFM-18 GPD	21	131023	TEE-TANK-BR-1/4CX1/4CX1/4F
4	b	110005	*MEM-TFM-25 GPD-DRY	22	134002	VALVE-SHUT OFF 1/4MPT (RES.)
5	а	113004	LID-BLACK 1/4" FPT UNASSEMBLED	23 a	134007	VALVE-ADAPTA VALVE
5	b	113007	LID-WHITE 1/4" FPT UNASSEMBLED	24	134011	VALVE-CHECK-PLA-ELBOW1/4CX1/8M
6	а	113017	HOUSING-FILTER 10" BLUE	25 a	137013	BRACKET-4SV-STEEL-WHITE
6	b	113024	HOUSING-FILTER 10" WHITE	25 b	137026	BRACKET-5SV-STEEL-WHITE
7		113032	VESSEL-MEM-HOUSING-RES	26	146001	SCREW-#10-3/4" PHIL PANHEAD
8	а		FAUCET-AG-CHROME (TF)	27	146004	SCREW-#10-1" PHIL PANHEAD
8	b	116002	FAUCET-AG-WAVE BLK ON SS	28	164006	CLIP-MTG-MEM-VESSEL
8	С	116007	FAUCET-AG-WAVE WHT ON SS	29	164010	CLIP-DOUBLE-MEM TO IL (OPTIONAL)
9	а	119004	TANK-PRES-3 GAL-BLUE	30	164016	DRAIN SADDLE 3/8"
9	b	119007	TANK-PRES-3 GAL WHITE	31	119028	TANK STAND
10	а	122004	FLOW RESTRICTOR 150 ML	32	113029	O-RING FILTER HOUSING
10	b	122017	FLOW RESTRICTOR 250 ML	33	199328	MANUAL 4SV & 5SV PR-14
11		125002	NUT-PL-1/4C-WHITE-CELCON	34	140007	GREEN TUBING
12		125005	NUT-PL-1/4C-BLACK-NYLON	35	140005	BLACK TUBING
13		125017	CON-PL-1/4CX1/4M	36	140004	BLUE TUBING
14		125031	ELB-PL-1/4CX1/8M-90			
15		125034	ELB-PL-1/4CX1/4M-90	2000 10		

Page 19

## **California Certification**

State of California Department of Health Services

## Water Treatment Device Certificate Number

00 - 1452

Date Issued: October 17, 2000 Date Revised: October 17, 2002

#### Trademark/Model Designation

Watts Premier CRO-TFM-5SV-25

Watts Premier Deluxe Plus

Watts Premier PUR-TEK

Watts Premier RO-TFM-48X

Watts Premier RO-TFM-58V

Watts Premier Ultra 5

Watts Premier Watts 25

Watts Pure Water Watts RO-4

Watts Pure Water Watts RO-5

Replacement Elements:

sediment prefilter: 5M-10

carbon prefilters: 5M-CB or 56 cu.in. GAC

membrane: TFM-24

post filter: 1M-6 or 1M-10

Manufacturer: Watts Premier, Inc.

The water treatment device(s) listed on this certificate have met the testing requirements pursuant to Section 116830 of the Health and Safety Code for the following health related contaminants:

#### Microbiological Contaminants and Turbidity

Cysts Turbidity

Organic Contaminants

None

Inorganic/Radiological Contaminants

Arsenic<sup>1</sup> Barium

Cadmium

Chromium (hexavalent)

Chromium (trivalent)

Copper

Fluoride.

Lead

Radium 226/228

Selenium

Rated Service Capacity: not applicable Rated Service Flow: 9 gallons per day

Do not use where water is microbiologically unsafe or with water of unknown quality, except that systems certified for cyst reduction may be used on disinfected waters that may contain filterable cysts.

<sup>&</sup>lt;sup>1</sup> Claims for arsenic reduction shall only be made on water supplies maintaining detectable residual free chlorine at the reverse osmosis (RO) system inlet. Water systems using an in-line chlorinator should provide a minimum of 1 minute chlorine contact time before the RO system.

#### Watts Premier Inc. 1725 W. Williams Drive C-20 Phoenix, AZ 85027 USA

## California Certification # 00-1452 Watts Premier Product Data Sheet

5 SV Deluxe, CRO-TFM-5SV, Ultra 5 and Pur-Tek, Watts 25, Watts RO-4, Watts RO-5, RO-TFM-4SV, RO-TFM-

#### GENERAL USE CONDITIONS:

1. System to be used with municipal or well water sources treated and tested on regular basis to insure bacteriological safe quality. DO NOT use with water that is microbiologically unsafe or unknown quality without adequate disinfection before and after the system. Systems certified for cyst reduction may be used on disinfected water that may contain filterable cysts.

2. Operating Temperature: Maximum: 100°F (40.5°C) Minimum: 40° (4.4°)

3. Operating Water Pressure: Maximum: 100 psi (7.0kg/cm2) Minimum: 40 psi (2.8kg/cm2)

. pH 3 to 11

5. No iron present in incoming feed water supply.

6. Hardness of more than 7 grains per gallon (120 ppm) may reduce TFM membrane life expectancy.

7. Recommend TDS (Total Dissolved Solids) not to exceed 1800 ppm.

RECOMMENDED REPLACEMENT PARTS AND CHANGE INTERVALS:

Note: Depending on incoming feed water conditions replacement time frame may vary. **Description Change time Frame** Price Sediment Pre-filter: #5m-10 6 Months \$4.50 Carbon Pre-filter: #GAC-410-56/#5MCB \$9.00/10.50 6 Months Final Carbon filter #1m-6/#1M-10 12 Months \$9.00/11.95 R.O. Membrane: #TFM-24 2 to 5 years \$82.95

This system has been tested according to NSF/ANSI 58 for reduction of the substances below. The concentration of the indicated substances in water entering the system was reduced to a concentration less than or equal to the permissible limit for water leaving the system as specified in NSF/ANSI 58. This system has been tested for the treatment of water containing pentavalent arsenic (also known as As (V), As (+5), or arsenate) at concentrations of 0.30 mg/L or less. This system reduces pentavalent arsenic, but may not remove other forms of arsenic. This system is to be used on water supplies containing a detectable free chlorine residual at the system inlet or on water supplies that have been demonstrated to contain only pentavalent arsenic. Treatment with chloramine (combined chlorine) is not sufficient to ensure complete conversion of trivalent arsenic to pentavalent arsenic, Please see the Arsenic Facts section of the Performance Data Sheet for further information.

	Avg. In.	Avg. Eff.	% Reduction	n pH	Pressure	Max Eff.	Inf. challenge concentration mg/L	Max Allowable concentration mg/L
Arsenic (Pentavalent)	334.615 ug/L	5.0385 ug/L	98.4%		50psi	19 ug/L	$0.30\pm10\%$	0.010 mg/L
Barium Reduction	10.2 mg/L	0.207  mg/L	97.9%	7.24	50psi	0.3  mg/L	10.0±10%	2.0
Cadmium Reduction	0.036  mg/L	0.0005 mg/L	98.6%	7.49	50psi	0.0007	$0.03\pm10\%$	0005
Chromium (Hexavaler	it) 0.15 mg/L	0.013 mg/L	91.3%	7.24	50psi	0.03	0.03±10%	0.1
Chromium (Trivalent)	0.17 mg/L	.01 mg/L	94.1%	7.24	50psi	0.01	$0.03\pm10\%$	0.1
Copper Reduction	3.1 mg/L	0.03 mg/L	99.0%	7.64	50psi	0.04	$3.0\pm10\%$	1.3
Cysts	222,077#/ml	10 #/ml	99.99%			58	minimum 50,000/mL	
Fluoride Reduction	8.0 mg/L	0.5  mg/L	93.9%	7.49	50psi	0.7	$8.0\pm10\%$	1.5
Lead Reduction	0.15  mg/L	0.002  mg/L	98.6%	7.49	50psi	0.003	$0.15\pm10\%$	0.010
Radium 226/228	25pCi/L	5pCi/L	80.0%	7.24	50psi	5pCi/L	25pCiL±10%	5pCiL
Selenium	0.10	0.008	92.0%		50psi	0.011	$0.10\pm10\%$	0.05
TDS			96.8%	7.84			750±40mg/L	187
Turbidity	10.2 mg/L	0.26  mg/L	97.5%			0.83	11±1 NTU	0.5 NTU

Model No.	Avg. Influent TDS	Avg. Effluent TDS	Avg. TDS DPR IN/EFF REDUCTION	RECOVERY	GALLONS	EFFICIENCY
	765 mg/l	23mg/l	96.8%	15.5%	9.06gpd	8.35%

Note: Depending on water chemistry, water temperature, and water pressure Watts Premier's R.O. Systems production and performance will vary.

Efficiency rating means the percentage of the total water required to operate the system that is treated and available to the user.

REFER TO OWNER'S INSTALLATION/SERVICE MANUAL FOR FURTHER MAINTENANCE REQUIREMENTS AND WARRANTY INFORMATION.

Phone: (623) 931-1977 Fax: (623) 931-0191 Email: wpmail@wattsind.com

### Other Products from Watts Premier

Watts Premier has other fine water filtration products and accessories to enhance your water and to compliment your existing RO System. Listed on the next several pages are only a few of the items we offer. Visit our website at www.wattspremier.com or call our Customer Service Representatives at 1-800-758-5582 (inside USA) 1-623-931-1977 (outside USA) for more products.



Deluxe Filter replacement kit for 5 stage reverse osmosis systems Includes one 10" sediment filter, two 10" GAC filters, three pre-lubricated

\$29.95/Kit

O-Rings, one 6" polishing filter with connectors.

#### **Deluxe Plus Filter replacement kit**

Same as above including a 10" polishing filter instead of a 6".

Part No. 560066 \$31.95/Kit



#### **Premium Filter replacement kit**

Compatible with all Watts Premier Reverse Osmosis and other water filtration systems. These filters provide an extra level of filtration by allowing for more contact between the carbon media and your water.

Part No. 560002 \$34.95/Kit

Premium Plus Filter Kit

Same as above, plus heavy duty wrench, 10" final filter and fittings.

Part No. 560067 \$43.95/Kit



#### Heavy Duty Wrench

This wrench fits all Watts Premier filter bowls, membrane housing and those of most of competing brands.

Part No. 164003 \$ 4.95/ea



#### **Pocket Total Dissolved Solids (TDS) Monitor**

Test water electronically to verify reverse osmosis membrane effectiveness. Carrying case included.

Part No. 273001 \$39.95/ea

<sup>\*</sup>All prices subject to change without notice.



**Wave Faucets by Watts Premier** allow for a variety of choices to match your kitchen decor.

Available colors include:

 Part No. 116022 Chrome
 \$30.95

 Part No. 116010 White
 \$27.95

 Part No. 116026 Black
 \$27.95

 Part No. 116021 Almond
 \$27.95

 Part No. 116002 Black on chrome
 \$25.95

 Part No. 116006 White on chrome
 \$25.95



**Watts Premier Ice Maker Kit -** High efficiency replaceable filter that can last up to 3 years or 10,000 gallons. Prefect for residential and commercial ice makers as well as refrigerators, drinking fountains, coffee & tea brewers, motor homes and campers. Reduces chlorine taste and odor.

Part No. 500327 \$36.95/ea



#### Whole House Filter

Great for sediment problems such as in well water supply or areas where dirt and rust particles are a problem. Includes 30 Micron sediment filter, ball valve, mounting bracket and wrench. (1" ports).

Part No. 500221 \$86.95/ea

Replacement filter

Part No. 204009 \$ 7.95/ea



#### **Water Pressure Gauge**

This gauge mounts onto your outside hose connection to accurately show your home's water pressure up to 300 psi. A red needle shows peak overnight pressure, which may exceed readings during the day. High pressure readings may indicate the need for pressure regulator to prevent damage to appliances.

Part No. 261003 \$14.95/ea



#### **Whole House High Performance Water Pressure Regulator**

Provides water pressure control solutions for residential, commercial, and industrial applications. Offers durability and years of continuous trouble free operation.

Part No. 107001 \$64.95/ea



#### **Ball Valve Adaptor**

Eliminates the need to drain the tank during normal filter changes. This easy to install valve attaches to the top of your water tank. The valve, plastic tee and teflon tape are included. The tank should always be drained after the membrane is changed.

Part No. 500077 \$ 9.95/ea

#### FILTERED SHOWERS..."YOU CAN FEEL THE DIFFERENCE"

#### Chlorine in Your Shower....

It kills germs, bacteria and other microorganisms. It also readily passes through cell walls, and attaches to fatty acids in the cell, disrupting life-sustaining functions. The human body is composed of billions of similar cells, which also absorb chlorine. One half of our daily chlorine exposure can come from showering. Not only is chlorine absorbed through the skin, but also vaporizes in the shower, inhaled into the lungs and transferred directly into the blood system. Symptoms of chlorine exposure include dry skin, brittle hair and flaking scalp.

## Special Chlorgon & KDF media – More effective then carbon medias with hot water applications in the removal of the following.

- $\sqrt{\text{Free Chlorine (CL-)}}$   $\sqrt{\text{Iron oxide (rust water)}}$
- √ Combined Chlorine (Sodium Hypochlorite) √ Dirt, sediment
- $\sqrt{}$  Hydrogen Sulfide (Rotten egg smell)  $\sqrt{}$  Odors
- $\sqrt{}$  Plus, its pH balanced.



#### **Deluxe Shower Handle with Built in Filter**

5-Way Massaging Spray 72" Reinforced Hose High Strength Bracket Triple Plated Finish

Reversible Filter Cartridge (Model HHC)

Cartridge Life Rating: 3 months

Part No. 107090 WHITE \$42.95 Part No. 107091 CHROME \$44.95 Part No. 107092 GOLD \$48.95

#### Replacement filters 2PK



Part No. 107075 \$14.95/pk

Replacement filters 2PK



#### Shower Falls Deluxe Shower Handle with Built in Filter

Curved Ergonomic Shower Handle

Filter Handle Extension

**Dual Swivel Adjustment** 

Ultra Deluxe 5 Way Massaging Spray

72" Reinforced Hose

Chrome Plated Brass Bracket & Swivel Ball Extension

Triple Plated Finish

Reversible Filter Cartridge (Model HHC)

Cartridge Life Rating: 3 months





# All-In-One reversible High-Flow Filter Deluxe 5-Way Massaging Spray

Soft-Touch" Adjustment Pads Anti-Scaling Spray Nozzle High Strength Housing Triple Plated Finish

Cartridge Life Rating: 6 months

Part No. 107098 White/Chrome \$42.50 Part No. 107099 White/Gold \$45.00

\*All prices subject to change without notice.



Replacement filter



Part No. 107080 \$15.85/ea

## WARRANTY REGISTRATION

Thank you for selecting Watts Premier for your water filtration needs.

# 4 Ways to Register

1. Online at www.wattspremier.com

Register your product online and recieve a 5% discount on your next online order, Plus recieve reduced shipping.

- 2. Call in your information 1-800-752-5582 Call and we will enter your information.
- 3. Fax in your information 623-931-0191 Fax this form directly to us.
- 4. Mail in the information.

Please complete the form below. Mail to: Watts Premier
1725 W. Williams Dr. C-20
Phoenix, AZ 85027

Registering will insure you recieve Watts

**FREE** 

Filter Reminder Service

Watts Premier Inc. is concerned for the saftey of your personal information. Watts Premeir collects personal information when you register with Watts Premier. This information is stored in our data base and we do not rent, sell, or share personal information with other people or nonaffiliated companies. We reserve the right to send you certain types of communications such as direct mail, email, or by telephone relating to our products or products that you have purchased. We limit access to your personal information to those employees who will directly provide you with services or products in order to do their jobs. We want to offer you four ways to communicate with us. 1.Online, 2.Fax, 3.Telephone, and 4. Mail the form below. By registering your product you will receive the full benifit of our warranty. Watts Premeir will also send you a semi-annual filter change reminder beginning six months from date of installation. To insure the highest quality of your water, filters should be replaced every 6 months. If you have any questions or comments please give us a call at 1-800-752-5582 M-F 8:00am -5:00pm MST.

First Name:_		Last Name:						
Address:			City:					
State:				Zi	p Code: _			
Country:	□USA	□ CANADA	□ме	XICO		ER		
Phone #	<del>-</del>		_ Emai	l Addı	ess:			
Date of Purch	nase:		Date o	of Insta	ıll:			
Installed By:	☐ SELF	☐Plumbing Prof	essional	Whe	re Purchas	sed:		
Model Number	er:			Seria	l Number: <sub>-</sub>			xxxxxx

Watts Premier, Inc. Phone: 800-752-5582 1725 W. Williams Drive C-20 www..wattspremier.com

Phoenix, AZ 85027 Fax: 623-931-0191

## WARRANTY REGISTRATION

## Please Fill out and keep for your Records

First Name:		_ Last Name:				
Address:		City:				
State:		Zip Code:				
Country:	□ USA □ CANADA	☐ MEXICO ☐ OTHER				
Phone #		Email Address:				
Date of Purchas	se:	Date of Install:				
Installed By:	☐ SELF ☐ Plumbing Pro	fessional Where Purchased:				
Model Number:		Serial Number:xxxxxx				

Insert into envalope and return to Watts Premier

Watts Premier 1725 W. Williams Dr. C-20 Phoenix, AZ 85027

Service Re		Date of Install:	Insta	ılled by:	
Date	1st Stage Sediment (6 months)	2nd Stage Carbon (6 months)	3rd Stage Carbon (6 months)	In-line Carbon Final Filter (1 year)	TFM Membrane (2-5 years)
NOTES:	<u> </u>		<u> </u>		<u> </u>

## **Limited Warranty**



#### **What your Warranty Covers:**

If any part of your WATTS PREMIER Reverse Osmosis System is defective in workmanship (excluding replaceable filters and membranes), return unit after obtaining a return authorization (see below), less tank, within 3 year of original retail purchase, WATTS PREMIER will repair or, at WATTS PREMIER'S option, replace the system at no charge.

#### **How to obtain Warranty Service:**

For warranty service, call 1-800-752-5582 for a return authorization number. Then, ship your Reverse Osmosis unit (less tank) to our factory, freight and insurance prepaid, with proof of date of original purchase. Please include a note stating the problem. Premier will repair it, or replace it, and ship it back to you prepaid.

#### What this warranty does not cover:

This warranty does not cover defects resulting from improper installation, (contrary to WATTS PREMIER's printed instructions), from abuse, misuse, misuse, misupplication, improper maintenance, neglect, alteration, accidents, casualties, fire, flood, freezing, environmental factors, water pressure spikes or other such acts of God.

This warranty will be void if defects occur due to failure to observe the following conditions:

- 1. The Reverse Osmosis System must be hooked up to a potable municipal or well cold water supply.
- 2. The hardness of the water should not exceed 7 grains per gallon, or 120 ppm.
- 3. Maximum incoming iron must be less than 0.2 ppm.
- 4. The pH of the water must not be lower than 3 or higher than 11.
- 5. The incoming water pressure must be between 40 and 100 pounds per square inch.
- 6. Incoming water to the RO cannot exceed 105 degrees F (40 degrees C.)
- 7. Incoming TDS/Total Dissolved Solids not to exceed 1800 ppm.
- 8. Do not use with water that is micro-biologically unsafe or of unknown quality without adequate disinfection before or after the system.

This warranty does not cover any equipment that is relocated from the site of its original installation.

This warranty does not cover any equipment that is installed or used outside the United States of America and Canada.

#### LIMITATIONS AND EXCLUSIONS:

WATTS PREMIER WILL NOT BE RESPONSIBLE FOR ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTIBILITY AND FITNESS FOR A PARTICULAR PURPOSE. PREMIER WILL NOT BE RESPONSIBLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING TRAVEL EXPENSE, TELEPHONE CHARGES, LOSS OF REVENUE, LOSS OF TIME, INCONVENIENCE, LOSS OF USE OF THE EQUIPMENT, AND DAMAGE CAUSED BY THIS EQUIPMENT AND ITS FAILURE TO FUNCTION PROPERLY. THIS WARRANTY SETS FORTH ALL OF PREMIER'S RESPONSIBILITIES REGARDING THIS EQUIPMENT.

#### OTHER CONDITIONS:

If PREMIER chooses to replace the equipment, WATTS PREMIER may replace it with reconditioned equipment. Parts used in repairing or replacing the equipment will be warranted for 90 days from the date the equipment is returned to you or for the remainder of the original warranty period, whichever is longer. This warranty is not assignable or transferable.

#### YOUR RIGHTS UNDER STATE LAW:

Some states do not allow limitations on how long an implied warranty lasts, and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply. This warranty gives you specific legal rights, and you may have other legal rights which vary from state to state.